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sa City of Chicago Office of Inspector General

## Table of Contents

II EXECUTIVE SUMMARY	3	
A   CONCLUSION	3	:
B   FINDING	3	;
C   RECOMMENDATIONS	3	
D   DOB RESPONSE	3	
III BACKGROUND	5	
A   CONSTRUCTION WORK MAY REQUIRE PERMITS, CERTIFICATES OF OCCUPANCY, AND INSPECTIONS		6
B   CHICAGO IS MODERNIZING ITS CONSTRUCTION CODES	8	
III   FINDING AND RECOMMENDATIONS	9	
A   DOB CONSISTENTLY COMPLETES REQUIRED INSPECTIONS IN BUILDINGS REQUIRING CERTIFICATES OF OCCUPANCY	10	
B   DOB SCHEDULED INSPECTIONS FOR 91.5% OF REQUESTS, BUT THE DEPARTMENT DOES NOT ENSURE THAT ALL PERMIT HOLDERS REQUEST "I" REQUIRED INSPECTIONS	11	
C   OPERATIONAL INCONSISTENCIES AND A LACK OF MONITORING TOOLS PREVENT DOB FROM TRACKING ITS PERMIT INSPECTION PERFORMANCE	11	
IV   OBJECTIVE, SCOPE, AND METHODOLOGY	15	
A   OBJECTIVE	15	
B   SCOPE	15	
C   METHODOLOGY	15	
D   STANDARDS	16	
E   AUTHORITY AND ROLE	16	
APPENDIX A   SOURCES OF INFORMATION TO REVIEW BUILDING PERMIT HISTORY AND INSPECTION COMPLIANCE		17
A   DOB: BUILDING PERMIT APPLICATION STATUS	17	
B   CITY OF CHICAGO DATA PORTAL: BUILDING PERMITS	17	
C   DOB: BUILDING RECORDS	17	
D   CITY OF CHICAGO DATA PORTAL: BUILDING VIOLATIONS	18	
E   CITY OF CHICAGO LAND USE AND ZONING MAP	18	

## Acronyms

AIS	Department of Assets, Information and Services
COO	Certificate of Occupancy
DOB	Department of Buildings
IBC	International Building Code
ICC	International Code Council
MCC	Municipal Code of Chicago
OIG	Office of Inspector General

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

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The Department of Buildings (DOB) consistently performs required inspections for buildings that require a Certificate of Occupancy (COO).

If a building does not require a COO, DOB's inspection processes allow for its construction and occupancy regardless of whether it has passed all required inspections.

### OIG identified 42 buildings within DOB's permit and inspections system that did not have all required inspections and found the associated buildings to be completed.

Only 198 (49.7%) of the 398 required inspections for these buildings were performed.

Only 11 (less than 3%) of these required inspections received passing marks.

These included 35 single-family homes, several of which had already been sold or listed for sale.

DOB does not proactively monitor permits with no inspection requests^

As of December 2020, 83% of building permits issued from 2017 to 2019 remained open. -Based on their dates of issuance, these permits should have been deemed: expired or the contractors should have completed the associated work.' -he-...

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

## I | Executive Summary

The Office of Inspector General (OIG) conducted an audit of the Department of Buildings' (DOB) inspection process for construction work subject to permit requirements. The objective of the audit was to determine whether DOB inspects construction work subject to permit requirements to verify compliance with the Chicago Construction Codes.

## A | Conclusion

DOB relies on requests from permit holders to schedule required inspections. This process complies with the Chicago Construction Codes, but it does not ensure that permit holders request all required inspections. DOB does not have a process to determine which permits require inspections or which inspections remain outstanding. While DOB reliably schedules requested inspections and only issues Certificates of Occupancy (COOs) once inspections are complete, its reactive approach allows for the construction and occupation of some buildings which do not require COOs without the completion of all required inspections.<sup>1</sup>

## B | Finding

DOB's inspection processes allow some permit holders to construct buildings without required inspections. In a review of permits issued between January 1, 2017, and December 31, 2019, OIG identified 42 buildings within DOB's permit and inspection system that did not have all required inspections and found that the associated buildings had nonetheless been fully constructed. These included 35 single-family homes, several of which have already been sold or listed for sale. In these 42 cases-all buildings for which no COO was required-DOB noted that the general contractors had failed to request inspections. While the Department consistently performs requested inspections, it does not use available data to identify situations where permit holders have not requested required inspections. In contrast, DOB does ensure the inspection of buildings that require COOs.

## C | Recommendations

OIG recommends that DOB develop procedures to ensure that it completes required inspections before a building is fully constructed. The Department should also train its staff to maintain data in an effective and consistent manner. Further, DOB should proactively monitor issued permits, and improve its data quality to support thorough and accurate monitoring of those permits and evaluation of program performance. Finally, the Department should consider alternative procedures to ensure that permit holders request inspections, such as requiring that a wider variety of buildings receive COOs.

## D | DOB Response

In response to our audit findings and recommendations, DOB stated that it has developed and implemented new procedures related to building permit inspections. The Department also committed to improving documentation and communication of those procedures to contractors and

<sup>1</sup> The City requires COOs for projects involving the construction or substantial alteration of four or more residential units or non-residential space exceeding 10,000 square feet, a change of occupancy type, or the construction or substantial rehabilitation of any space for certain occupancy types

the public. DOB described limitations of its current permit and inspection data management system and stated that it has worked with the Department of Assets, Information and Services (AIS) "for well over a decade" to replace it. DOB stated that until the system is replaced, it has implemented a daily email that identifies permits over six months old with no inspection requests. DOB will assign the related locations to inspectors to determine the status of construction. Related to the quality of data in its current system, DOB did not describe specific procedures to improve the data quality which would support thorough and accurate monitoring of those permits and evaluation of program performance.

The specific recommendations related to the finding, and DOB's response, are described in the "Finding and Recommendations" section of this report.

## II | Background

The mission of the Department of Buildings (DOB) is to "enhance safety and quality of life for Chicago's residents and visitors through permitting, inspections, trade licensing, and code enforcement."<sup>2</sup> In particular, the Department administers and enforces the Chicago Construction Codes, which "establish minimum standards for the construction, alteration, repair, maintenance, and demolition of buildings and other structures in order to protect public health, safety, and welfare."<sup>3</sup> Figure 1 depicts the different sections of the Construction Codes.

**Figure 1: The Chicago Construction Codes Include 11 Titles**

### Administrative Provisions

#### Fuel Gas Code

#### Mechanical Code

#### Energy Conservation Code;

#### Plumbing Code

#### Building Rehabilitation Code

Source- Municipal Code of Chicago (MCC) § 14A-1-101.1.1.

To administer and enforce the Construction Codes, DOB reviews construction plans, issues building permits, performs inspections in response to requests or complaints, and issues citations for code violations.<sup>4</sup> DOB is also responsible for trade licensing and disciplinary action against contractors that do not meet professional standards. Specifically, the Construction Codes state that:

"The building official<sup>5</sup> is authorized and directed to [...] issue permits for the construction, rehabilitation, demolition, and moving of structures, inspect the premises for which such

<sup>1</sup> City of Chicago Department of Buildings, "Mission," accessed March 9, 2022. [https://www.Chicago.gov/city/en/depts/bldgs/auto\\_generated/bldgs\\_mission.html](https://www.Chicago.gov/city/en/depts/bldgs/auto_generated/bldgs_mission.html)

<sup>3</sup> The Chicago Construction Codes are Titles 14A through 14C, 14E through 14G, 14M, 14N, 14P, 14R, and 14X of the MCC. City of Chicago Department of Buildings, "Construction Codes," accessed March 9, 2022, [https://www.Chicago.gov/city/en/depts/bldgs/provdrs/bldo\\_code.html](https://www.Chicago.gov/city/en/depts/bldgs/provdrs/bldo_code.html)

\* Per the 2022 City of Chicago Appropriations Ordinance, DOB has a budget of \$34.9 million and 229 full-time equivalent positions.

<sup>5</sup> The building official is the DOB commissioner or an authorized representative MCC § 14A-2-202

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

permits have been issued, and enforce compliance with the provisions of the Chicago Construction Codes,"<sup>6</sup> and •

"The permit holder must notify the building official when work done pursuant to a permit is ready for [inspections]. Upon notification, the building official is directed to cause the inspections to be made or otherwise verify ongoing compliance with the Chicago Construction Codes and allow the work to proceed."<sup>7</sup>

## A | Construction Work May Require Permits, Certificates of Occupancy, and Inspections

DOB reviews applications and issues building permits. Property owners or their representatives, such as licensed contractors, file permit applications, which DOB reviews before approval and issuance.<sup>8</sup> Construction work requiring permits may not begin until the Department issues the permits. As shown in figure 2, not all work requires permits.

Figure 2: Major Construction Work Requires Permits and Inspections

### PeriSKled

Major work, such as:

- Installing new boiler systems
- « Building garages, porches, or decks
- Moving walls, doors, columns, or beams
- Moving or adding new windows or doors

Minor maintenance, such as:

- Installing fences up to 5 feet tall
- Painting
- Replacing windows, doors, siding, furnaces, or plumbing fixtures

Source: DOB "Guide to Permits."<sup>9</sup>

In addition to permits, the Construction Codes require Certificates of Occupancy (COOs) for certain projects. DOB issues a COO only after confirming that construction work complies with the Construction Codes. The City requires COOs for projects involving the construction or substantial alteration of four or more residential units or non-residential space exceeding 10,000 square feet; a change of occupancy type; or the construction or substantial rehabilitation of any space for certain occupancy types. By contrast, buildings such as single-family homes and two- or three-flats do not require COOs. Where COOs are required, some banks and insurance companies require parties to provide the Certificates before issuing loans or providing coverage. For buildings that require COOs, there are several additional steps during the inspection process, as depicted in Figure 3.

<sup>8</sup>MCC§ 14A-1-104 2 <sup>9</sup>MCC§ 14A-5-502 3.

<sup>0</sup> For purposes of this audit we defined "construction permits" as new construction, renovation, "Easy," and electrical permits. An Easy permit applies to small construction and improvement projects or for the repair and replacement of elements that do not require architectural drawings. See the Methodology section for additional detail <sup>6</sup> City of Chicago Department of Buildings, "Guide to Permits," October 2019, accessed March 9, 2022, <https://www.Chicago.gov/content/dam/city/clepts/bldqs/qgeneral/Homeowner/GuidetoPermits110119.pdf>

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

Figure 3: DOB Follows a Distinct Permit Inspection Process for Buildings That Require COOs

Does not require a COO

Requires a COO

DOB issues construction permits, and the permit holder begins work.

The permit holder completes initial phase of construction and requests rough inspections through DOB's webmail system.  
DOB issues construction permits, and the permit holder begins work.

The permit holder completes initial phase of construction and requests a rough inspections through DOB's webmail system.

DOB inspects rough construction. Each DOB trade section completes its own scheduling and inspections.

The permit holder completes construction and requests final inspections.

DOB inspects final construction. Each DOB trade section completes its own scheduling and inspections.  
A team of DOB inspectors dedicated to working on COOs schedules and performs the rough inspections.

The permit holder completes construction and submits a COO application to request final inspections.

A team of DOB inspectors dedicated to working on COOs schedules and performs the final inspections.

^^^^^ People can now occupy or use the structure.  
DOB staff review the permit records to ensure the permit holder paid required fees and passed inspections.

DOB issues the COO.

People can now occupy or use the structure.

Source DOB description of the permit inspection process.

A single permit can require multiple types of inspections; for example, a new construction permit for a single-family home might require new construction, masonry, electrical, and plumbing inspections. These different areas that fall under the general umbrella of construction are known as "trades." Typically, each trade associated with a permit requires two inspections: a "rough" inspection to confirm that initial work conforms to the applicable Code, and a final inspection to

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

confirm that contractors completed the work correctly. To illustrate this point, DOB management stated that it would expect a two-flat to have at least ten inspections performed across five trades, i.e., a rough and final inspection for each.

<sup>10</sup> The Construction Codes provide that permit holders must pass all required inspections before a structure may be occupied or used.

DOB inspects work subject to permit requirements and issues stop work orders for unpermitted work. The Department may also suspend the permit privileges or revoke the licenses of contractors who perform work outside the scope of permits or do not request required inspections.<sup>11</sup> DOB management stated that they rely on complaints from the public and other contractors to identify such instances.

## **B | Chicago Is Modernizing Its Construction Codes**

In 2015, the City initiated a multi-year effort to bring Chicago Construction Codes into alignment with the standards of the

model International Building Code (IBC). City Council approved major updates to the Construction Codes in April 2019. Although the City had updated parts of the Codes throughout the years, their basic structure and content was more than 70 years old.

The IBC is the product of the International Code Council (ICC), which has also developed 14 other model codes that have been adopted by jurisdictions across the United States. The ICC develops each model code through a process involving a review by committees of interested parties (such as regulators, builders, and owners), solicitation of public comment, and ratification by ICC members.

ICC policy acknowledges that each jurisdiction's construction codes may differ from the IBC because each must address its-particular circumstances. However, the ICC expects all jurisdictions to inspect all permitted construction work. OIG interviewed representatives of peer jurisdictions which, like Chicago, also follow the IBC model to understand the administration and enforcement of provisions in their respective codes. Specifically, OIG spoke with staff from Clark County, Nevada; Philadelphia; and New York City. While operations differ across these three jurisdictions, each agreed that permitted work must be inspected, and each jurisdiction's controlling law contains provisions to ensure that permit holders request required inspections for permitted work.

Notably, unlike Chicago, these jurisdictions require COOs or a similar document for all-not just a subset of-buildings. Clark County and Philadelphia also have processes to monitor building permits, including proactive inspections and required communication with permit holders. In contrast, Chicago does not proactively monitor permits for buildings that do not require COOs.

<sup>10</sup> A two-flat is a residential building containing two apartments.

<sup>11</sup> MCC § 4-36

## III | Finding and Recommendations

DOB's inspection processes allow buildings that do not require COOs to be constructed and occupied without passing all required inspections. This creates potential safety risks for building occupants and users.

DOB issued 5,351 new construction permits between January 1, 2017 and December 31, 2019. As of April 27, 2021, DOB had conducted all related inspections for only 16.7% of those permits. To determine whether the outstanding inspections were justified-because construction had not begun, for instance-OIG reviewed 80 new construction permits from those with outstanding inspections and found,



- 42 permits were related to fully constructed buildings, including 35 single-family homes, several of which have already been sold or listed for sale;
- 20 permits were related to buildings which OIG could not determine the status of construction; and
- 18 permits had no inspections because the permit holders had not begun construction, or the permit had been voided.

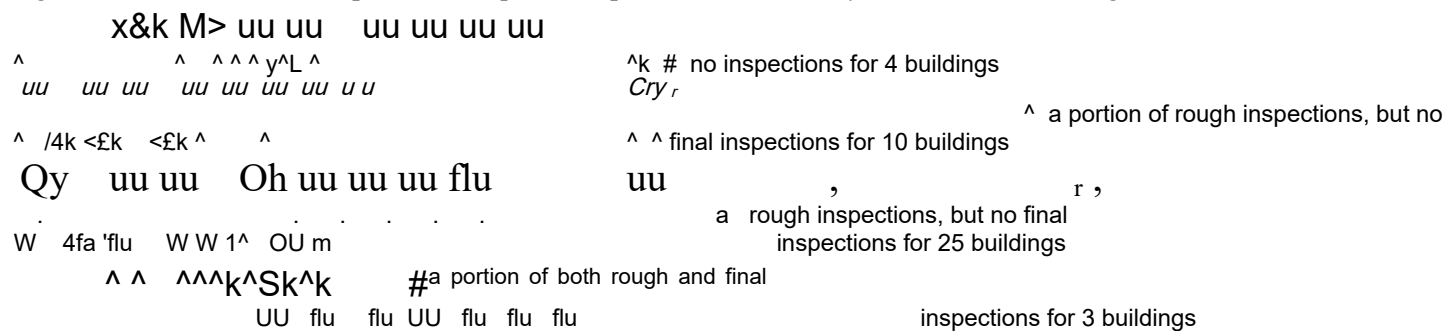
Figure 4 summarizes the 42 fully constructed buildings which DOB had not fully inspected.<sup>12</sup>

Appendix A summarizes information available on City websites to research permit and inspection request data for a given address

#### Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

Figure 4: DOB Did Not Complete the Required Inspections For 42 Fully Constructed Buildings



Source: DOB permit and inspection records.

For the 42 buildings identified by OIG:

DOB completed only 198, or 49.7%, of the 398 required inspections and only 11, or 3%, received passing marks.

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DOB reviewed OIG's analysis of the 42 buildings, researched each permit, and noted that the general contractors had failed to request the relevant inspections and that DOB's "current system does not flag general contractors that fail to request inspections." As mentioned above, DOB does not initiate an inspection unless it receives a request from a permit holder or a complaint. In fact, the Department stated that the enforcement process for non-compliant buildings most often begins with third-party complaints.

While DOB's permit and inspections system, Hansen 7, does not automatically flag permits without inspection requests, existing data allows for the identification of such situations. The Department, however, does not use this data in its possession to identify permit holders who have not requested inspections. Regarding the buildings discussed above, DOB had completed at least one inspection for 38 of the 42 buildings, demonstrating that it was aware the permit holder had begun construction and additional inspections should have followed.

## **A | DOB Consistently Completes Required Inspections In Buildings Requiring Certificates of Occupancy**

OIG found that DOB ensures it inspects buildings that require COOs. Of 1,236 unique permits issued between 2017 - 2019 for buildings requiring COOs, DOB completed 98.9% of the required inspections and gave passing marks in 97.2%. Factors ensuring that permit holders request inspections, and that DOB completes inspections in this context, include the following:

- DOB has staff positions specifically assigned to COOs.
- DOB verifies completion of required inspections before issuing COOs.
- DOB staff have an automated daily report identifying permits in buildings requiring COOs that are at least six months old and do not have pending inspection requests.
- Permit holders working on projects that require COOs often have additional incentives to obtain the Certificates, such as requirements for bank loans or insurance policies.

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

## **B | DOB Scheduled Inspections For 91.5% of Requests, But the Department Does Not Ensure That All Permit Holders Request Required Inspections**

DOB scheduled inspections for 91.5% of the 155,756 construction permit inspection requests received from 2017 through 2019. This aligns with the Department's stated intent to complete every requested inspection. However, DOB does not meet the IBC's expectation that jurisdictions inspect work subject to permit requirements. The Department's data related to permits issued during those years shows that,

- 82.6% of the permits remained "open" as of December 2020, the time of our review. Based on their issuance dates, they should have expired or the contractors should have completed the associated work;<sup>13</sup>
- 72.5% of the permits had no associated inspection requests as of December 2020; and,
- 65.6% of the permits with required inspections do not appear to have received complete inspections.

## **C | Operational Inconsistencies and a Lack of Monitoring Tools Prevent DOB From Tracking Its Permit Inspection Performance**

DOB's current data system does not allow it to identify all uncompleted required inspections. The Department is limited to determining inspection statuses on a permit-by-permit basis. Furthermore, DOB management stated that the pertinent records are not consistently maintained and, as a result, they inaccurately reflect inspection statuses.<sup>14</sup> The Department stated that it does not expect completion of 100% of inspections identified within Hansen 7 as required because some are identified as required in error. Such errors result from record maintenance issues which include the following:

- DOB does not consistently close permits after completing associated required inspections.
- Divisions within DOB use the "closed" status differently, leaving no clear way to tell which permits await inspections and which should have been closed or expired.
- The Department generally does not close or delete inspection requests associated with electrical permits issued for maintenance work, which do not require inspections.<sup>15</sup>
- DOB does not regularly close or delete inspections that it incorrectly assigned to a permit during the review of construction plans.

As a result of DOB's lack of proactive steps to monitor outstanding permits, and record maintenance issues, the Department cannot identify or quantify permits with uncompleted required inspections.

<sup>15</sup> Per MCC § 14A 4-413.10, permits become void if work is not started within 540 days of the permit's date of issue. <sup>16</sup> OIG notified the chief technology officer about data quality issues encountered during the audit on August 25, 2022. <sup>17</sup> DOB's system does not differentiate between electrical permits for maintenance work, which do not require inspections, and electrical permits for construction, which do require inspections

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

## Recommendations

1. DOB should develop and implement procedures to identify required inspections and ensure that it completes them.
2. DOB should proactively monitor permits with no requests for required inspections, and develop monitoring tools and procedures to determine the construction status of buildings.
3. To facilitate proactive monitoring, DOB should ensure that inspectors and supervisors use the current Hansen 7 system in a more effective and consistent manner. Specifically, DOB should,
  - a. ensure that inspectors and other staff consistently and appropriately close permits;
  - b. ensure that staff close inspections that are incorrectly assigned during plan review;
  - c. create categories to differentiate between permits that require inspections and those that do not;
  - d. provide training to ensure that staff enter data into Hansen 7 in a consistent manner; and
  - e. expand the use of existing automatically generated monitoring reports, if effective, or redesign the reports to increase their effectiveness for tracking departmental performance and identifying aged permits with outstanding inspections.
4. DOB should consider alternative procedures to ensure that permit holders request inspections, such as requiring that a wider variety of buildings receive COOs.

## Management Response<sup>16</sup>

1. *"DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those procedures with the contractors and the public. [ . . . ] While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes. [ . . . ]"*

*"While we await our modernized system, DOB has implemented the generation of a daily email that notifies all respective bureaus of all permits that were issued 6 month[s] ago with no inspection requested. The bureaus now assign these locations to their inspectors as they completed their assigned daily requested inspected to see if*

*work has started.*

*"If the work has started but not ready for a rough inspection, the inspector provides the contractors with the process to request inspections.*

*"If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request inspections.*

*"If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed.*

*"If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is voided in the system for inactivity.*

OIG excerpted the portions of DOB's response that were relevant to each recommendation. The complete response is attached as Appendix B

#### Audit of DOB's Permit Inspections Process

#### City of Chicago Office of Inspector General

*"DOB, like other jurisdictions, realize that there are bad actors. DOB, through the Municipal Code, has various tools to deal with bad actors. As with the IBC, the Municipal Code has stop work orders, permit revocation, fines, and other quasi-judicial and judicial actions that it takes against bad actors. Unlike the IBC, the Municipal Code has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. When an individual or business is caught under the bad actor ordinance, it is DOB's practice to go and check the prior permits of the bad actor to see if they failed to request the required inspections on those permits as well. Under the ordinance a bad actor cannot be listed on any new permits until they have come into full compliance on all prior projects. The ordinance is a collaboration between DOB, the construction industry, the skilled trades, and the public to root out bad actors including those that fail to request required permit inspections. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success.*

*"DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor.<sup>17</sup> That general contractor will remain suspended until such time as all required inspections have received a passing inspection result. [...]"*

2. *"[. . .] DOB, as other jurisdictions, follows the International Building Code (IBC) in requiring permit holders and their contractors to notify the department when the work is ready for inspection (IBC Section 110). This is industry best practice and DOB, and other jurisdictions, work in concert with contractors as the work progresses in the field. Construction timelines are fluid and contingent on variables such as financing, weather, material availability and delivery, labor availability, field changes, and even global pandemics. Building departments do not have crystal balls to monitor construction and renovation and dispatching inspectors based on an uneducated guess as where a project is in the work is neither feasible nor practical. ® [...]"*
3. *"[. . .] As this audit and prior audits note - the Hansen 7 system is extremely limited. As DOB has discussed in this and prior audits, DOB has been working diligently with AIS and its predecessor, DoIT, for more than a decade to have AIS develop a replacement system that will allow DOB to capture all data in a more configurable, searchable, and analytical system. DOB appreciates the work of the OIG in analyzing years of permit and inspection data. DOB does not have the professional auditor resources of the OIG, which is why DOB continues to work diligently with AIS to provide DOB with a modernized, interoperable, and analytical permitting and*

*inspection data management system. While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes. [ . . . ]"*

4. *"While DOB would not refer to them as alternate procedures, DOB notes that the construction industry and the skilled trades take great pride in their work and in their*

" The general contractor was involved with 9 of the 42 fully constructed buildings without the required number of permit inspections. OIG had provided DOB the full list of the 42 buildings

<sup>8</sup> OIG notes that DOB defined a proactive monitoring procedure-the generation of daily emails that identifies permits over six months old with no inspections requested-in their response to recommendation 1

#### Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

*commitment to worker and public safety and that includes fulfilling their obligation to request and pass required inspections. Law abiding builders and contractors do not require an alternate procedure to follow the law. Honest builders and contractors do not want to get a DOB stop work order, incur fines, have their permit privileges suspended, or have their trade licenses suspended or revoked. City action aside, honest builders and contractors do not want to incur civil liability for failing to request and pass required inspections. Honest builders and contractors do not put their license, livelihood, and reputation on the line by skipping inspections.*

*"The Municipal Code of Chicago also has stronger sanctions than the IBC for those who fail to request required inspection. In particular, Chicago has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success.*

*"[ . . . ] DOB does not agree with the OIG's suggestion that the Municipal Code of Chicago should be amended to require a certificate of occupancy for all new construction and renovation permits. Both New York City and Philadelphia, cited by the OIG as models, have encountered significant resource, operational, and administrative challenges in attempting to impose certificate of occupancy requirements on all permits. Further, the Municipal Code of Chicago requires rough and final inspections on permits with substantial structural, mechanical, electrical, plumbing, or ventilation work. Those final inspections serve the same purpose as a certificate of occupancy.<sup>19</sup> Even then, the duty to request a certificate of occupancy inspection remains the affirmative duty of the permit holder. DOB does not believe that the purpose of the Municipal Code of Chicago is to impose additional regulations on law abiding builders and contractors to redress the unlawful behavior of a few bad actors. DOB has supported and continues to support adding tools to the Municipal Code of Chicago, like the bad actor ordinance, which directly and specifically address bad actors. [ . . . ]"*

"" OIG noted on page 9 of this report that DOB conducted all related inspections for only 16.7% of 5,351 new construction permits issued between January 1, 2017 and December 31, 2019 that did not require a COO. OIG also noted on page 10 of this report that DOB completed 98.9% of the required inspections for buildings requiring a COO. While DOB asserts that final inspections serve the same purpose as certificates of occupancy, it does not specifically address the large disparity in inspection completion rates.

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

## IV I Objective, Scope, and Methodology

### A | Objective

The objective of the audit was to determine if DOB inspects construction work subject to permit requirements to verify compliance with the Chicago Construction Codes.

### B | Scope

This audit assessed DOB's inspection practices for permits with issue dates in the Hansen 7 system between January 1, 2017, and December 31, 2019. The audit did not assess the review and issuance of permits, the calculation and collection of permit fees, or the technical accuracy of the inspections.

### C | Methodology

To gain an understanding of the International Building Code, OIG spoke to representatives from the International Code Council. To gain an understanding of permit inspection practices in other jurisdictions, OIG spoke to staff from Clark County, Nevada; Philadelphia; and New York City.

To gain an understanding of DOB's process for requesting, scheduling, and performing inspections, OIG spoke with Department managers, inspector supervisors, and an inspection scheduler.

To determine how many permits remain open in Hansen 7, OIG examined the status of all 146,323 building permits with issue dates in Hansen 7 between 2017 and 2019.

To determine how many of the 125,844 new construction, renovation, Easy, and electrical permits within the scope period had associated inspection requests, OIG matched their permit numbers with 249,700 inspection requests from 2017 through November 13, 2020, the time of our review.

To identify buildings that were completed without receiving all required inspections, OIG selected a targeted sample of 80 new construction permits from among those with incomplete inspection records. This is not a statistical sample that can be extrapolated to all new construction permits. OIG reviewed these permits in Hansen 7 and DOB's Clearview system to determine the number of completed inspections for each permit. OIG also reviewed the address associated with each permit in Hansen 7 to determine if inspections could have been completed under a different permit number. OIG then looked up each permit's associated address in Google Street View at a date before and after permit issue dates to verify that the work described in the permit was completed. OIG shared the results of the analysis with DOB management who confirmed that 42 of the properties did not have all required inspections. DOB also confirmed that the 42 properties were missing inspection requests.

To determine whether DOB schedules inspections in response to requests, OIG identified all permits with associated webmail requests and matched each of the 155,756 requests to an inspection of the requested type at a date after the request was submitted for that permit. To determine what proportion of permits DOB completed the associated required inspections, OIG identified the most recent inspection record of each inspection type for each of the 125,844 permits and

noted whether this inspection was complete or incomplete.

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

To determine whether DOB performs the required inspections before issuing COOs, OIG identified 1,236 permits in the scope period that had received COOs, and then determined whether DOB completed all associated inspections.

## **D | Standards**

OIG conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that OIG plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. OIG believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## **E | Authority and Role**

The authority to perform this audit is established in the City of Chicago Municipal Code § 2-56-030 which states that OIG has the power and duty to review the programs of City government in order to identify any inefficiencies, waste, and potential for misconduct, and to promote economy, efficiency, effectiveness, and integrity in the administration of City programs and operations.

The role of OIG is to review City operations and make recommendations for improvement.

City management are responsible for establishing and maintaining processes to ensure that City programs operate economically, efficiently, effectively, and with integrity.

## Appendix A | Sources of Information to Review Building Permit History and Inspection Compliance

The following public information sources can be used to determine the status of building permit applications, permits issued, inspections, and violations for a given address. This data is reflective of DOB records and varies in consistency and completeness.

### A | DOB: Building Permit Application Status

To see the status of permit applications for a certain address, visit [https://www.chicago.gov/city/en/depts/bldqs/provdrs/permits/svcs/building\\_permit\\_status.html](https://www.chicago.gov/city/en/depts/bldqs/provdrs/permits/svcs/building_permit_status.html). This website includes,

- building permit application status for the previous 18 months;
- a description of the project and approved scope of work;
- the dates and types of reviews conducted by DOB while reviewing the permit application;
- trade sections that were part of permit review; and
- the status of DOB's permit review (there can be multiple permits under review or recently issued for a single address).

### B | City of Chicago Data Portal: Building Permits

To see the status of approved permits for a certain address, visit <https://data.cityofchicago.org/Building/Building-Permits/vdr8-5enu/data> and search by address or permit number.<sup>20</sup> This website includes,

- a description of work performed;
- contractor and permit holder information;
- fees paid for the permit; and
- estimated cost of a project.

### C | DOB: Building Records

To see the status of DOB inspections and alleged violations of the Construction Codes for a certain address, visit <https://webapps1.chicago.gov/buildingrecords/.21> This website includes,

- historic permit activity;
- inspection records;
- alleged code violations; and
- court or other enforcement actions.



-"" OIG reviewed the administration of the City's Data Portal. To review OIG's report, please visit <<https://igchicago.org/2020/03/23/advisory-concerning-the-city-of-chicago-data-portal/>>

<sup>21</sup> OIG conducted an audit of DOB's complaint-based inspection processes, fo review OIG's report, please visit <https://igchicago.org/2018/04/10/dob-complaint-based-inspections-audit/>

Audit of DOB's Permit Inspections Process

## **D | City of Chicago Data Portal: Building Violations**

To see violations issued by DOB, visit <<https://data.cityofchicago.org/Buildings/Building-Violations/22u3-xenr/data>>. This website includes,

- building violations issued since 2006;
- violations for work done without a permit;
- violations for work done contrary to permit; and
- violations for failure to arrange permit-related inspections.

## **E | City of Chicago Land Use and Zoning Map**

To review the City's zoning map, visit <<https://gisapps.chicago.gov/ZoningMapWeb/>>. This website includes,

- zoning district and special zoning approvals;
- land use designation; and
- special district designations such as Tax Increment Financing districts, historic districts, and landmarks.

Audit of DOB's Permit Inspections Process

# Appendix B | Complete Management Response

CITY OF CHICAGO

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DEPARTMENT OF BUILDINGS

**To:** Deborah Witzburg, Inspector General  
Office of the Inspector General

**CC:** Lori E. Lightfoot, Mayor

**From:** Matthew Beaudet, Commissioner "7%  
Department of Buildings ^>

**Re:** OIG Permit Inspection Process Audit # 20-0831

**Date:** July 29, 2022

## Response to Inspector General's Audit

I have had a full opportunity to review the report of the Office of the Inspector General's (OIG) Audit of the Permit Inspection Process #20-0831 dated July 7, 2022. The report involves the process of scheduling and conducting inspections on work performed pursuant to a building permit issued by the Department of Buildings (DOB) when necessary.

While the audit period predates my appointment as Commissioner, I and DOB welcome all constructive input to improve our processes and services.

DOB appreciates that the OIG's audit confirms that "DOB reliably schedules inspections once it receives requests and only issues Certificates of Occupancy (COO) once it completes inspections."

DOB agrees with the OIG that replacement of the Hansen 7 permit and inspection data management system can and will significantly improve DOB's ability to monitor building permits that require inspections and contractors whose duty it is to request inspections. As this audit and prior audits note - the end-of-life Hansen 7 system is limited in both data collection, configurability, searchable, and analytical reporting. Hansen 7 does not allow for functional tracking of the approximately 40,000 building permits issued per year, nor does it allow for time-configurable flags on active building permits for the purposes of monitoring construction timelines.

As DOB has discussed in this and prior audits, DOB has been working diligently with the Department of Assets, Information, and Services (AIS) and its predecessor, the Department of

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Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

Innovation and Technology (DoIT), for well over a decade to have AIS replace Hansen 7 with a system that will allow DOB to capture permit, inspection, and trade licensing data in a more configurable, searchable, and analytical system. As DOB has shared with AIS (and OIG during prior engagements), DOB's goal is for the system to also be interoperable with other City agencies. County agencies, State of Illinois professional license records, public utilities, and other systems to allow for DOB and other agencies to perform predictive analytics and deploy resources before buildings (especially housing) become distressed.

Again, DOB welcomes constructive input and remains committed to improving on its processes and services.

#### OIG Recommendations and DOB Responses

1. DOB should develop and implement procedures to identify required inspections and ensure it completes those inspections.

DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those procedures with the contractors and the public. As the OIG noted in the audit, not all building permits rise to the level of inspection. This includes many types of repair and replace (aka Easy) permits - such as the repair or replacement of windows, doors, gutters, fixtures; monthly electric maintenance permits; tuck pointing permits; and other minor work. While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes.

DOB, like other jurisdictions, follows the International Building Code (IBC) IBC in requiring permit holders and their contractors to notify the department when the work is ready for inspection (IBC Section 110). This is industry best practice and DOB, like other jurisdictions, works in concert with contractors as the work progresses in the field. Construction timelines are fluid and contingent on variables such as financing, weather, material availability and delivery, labor availability, field changes, and even global pandemics. That is exactly why the IBC and codes based on the IBC, like the Chicago Construction Codes, require the permit holder to contact the building department when they are ready for inspection.

DOB values its professional partnership with the private sector including the construction industry and the skilled trades. The industry and skilled trades take great pride in their work and in their commitment to worker and public safety. Most contractors and trade professionals take their duty to request and pass inspections to heart.

While we await our modernized system, DOB has implemented the generation of a daily email that notifies all respective bureaus of all permits that were issued 6 month ago with no . inspection requested. The bureaus now assign these locations to their inspectors as they completed their assigned daily requested inspected to see if work has started.

Audi! of DOB's Permit Inspections Process

 City of Chicago Office of Inspector General

If the work has started but not ready for a rough inspection, the inspector provides the contractors with the process to request inspections.

If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request inspections.

If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed.

If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is voided in the system for inactivity.

DOB, like other jurisdictions, realize that there are bad actors. DOB, through the Municipal Code, has various tools to deal with bad actors. As with the IBC, the Municipal Code has stop work orders, permit revocation, fines, and other quasi-judicial and judicial actions that it takes against bad actors. Unlike the IBC, the Municipal Code has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. When an individual or business is caught under the bad actor ordinance, it is DOB's practice to go and check the prior permits of the bad actor to see if they failed to request the required inspections on those permits as well. Under the ordinance a bad actor cannot be listed on any new permits until they have come into full compliance on all prior projects. The ordinance is a collaboration between DOB, the construction industry, the skilled trades, and the public to root out bad actors including those that fail to request required permit inspections. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success.

DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result.

As stated earlier, DOB agrees with the OIG that a modern data management system that captures all relevant data in a more configurable, searchable, and analytical manner will enhance our ability to deal with bad actors including those that do not request required permit inspections.

2. DOB should proactively monitor permits with no request for required inspections, and develop monitoring tools and procedures to determine the construction status of buildings.

DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those procedures with the

contractors and the public. DOB agrees with the OIG that a replacement data management system, which captures all relevant data in a more configurable, searchable, and analytical manner, will enhance our ability to deal with bad actors including those that do not request required permit inspections. DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes.

- If the work has started but not ready for a rough inspection, the inspector provides the contractors with the process to request inspections.

If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request inspections.

If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed.

If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is voided in the system for inactivity.

DOB, as other jurisdictions, follows the International Building Code (IBC) in requiring permit holders and their contractors to notify the department when the work is ready for inspection (IBC Section 110). This is industry best practice and DOB, and other jurisdictions, work in concert with contractors as the work progresses in the field. Construction timelines are fluid and contingent on variables such as financing, weather, material availability and delivery, labor availability, field changes, and even global pandemics. Building departments do not have crystal balls to monitor construction and renovation and dispatching inspectors based on an uneducated guess as where a project is in the work is neither feasible nor practical. That is exactly why the IBC and codes based on the IBC, like the Chicago Construction Codes, require the permit holder to contact the building department when they are ready for inspection.

DOB values its professional partnership with the private sector including the construction industry and the skilled trades. The industry and skilled trades take great pride in their work and in their commitment to worker and public safety. Most contractors and trade professionals take their duty to request and pass inspections to heart.

DOB, as other jurisdictions, realizes that there are bad actors. DOB, through the Municipal Code, has various tools to deal with bad actors. As with the IBC, the Municipal Code has stop work orders, permit revocation, fines, and other quasi-judicial and judicial actions that it takes against bad actors. Unlike the IBC, the Municipal Code has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. When an individual or business is caught under the bad actor ordinance, it is DOB's practice to go and check the prior permits of the bad actor to see if they failed to request the required inspections on those permits as well. Under the ordinance they cannot be listed on any new permits until they have come into full compliance on all prior projects. The ordinance

4

#### Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

is a collaboration between DOB, the construction industry, the skilled trades, and the public to root out bad actors including those that fail to request required permit inspections. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success.

DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result.

As stated earlier, DOB agrees with the OIG that a modern data management system that captures all relevant data in a more configurable, searchable, and analytical manner will enhance our ability to deal with bad actors including those that do not request required permit inspections.

3. To facilitate proactive monitoring, DOB should ensure that inspectors and supervisors use the current Hansen 7 system in a more effective and consistent manner. Specifically, DOB should:

- a. ensure that inspectors and other staff consistently and appropriately close permits;
- b. ensure staff close inspections that are incorrectly assigned during plan review;
- c. create categories to differentiate between permits that require inspection and those that do not; .
- d. provide training to ensure that staff enter data into Hansen 7 in a consistent manner; and
- e. expand the use of exiting automatically generated monitoring reports, if effective, or redesign the reports to increase their effectiveness for tracking departmental performance and identifying aged permits with outstanding inspections.

DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those procedures with the contractors and the public. DOB agrees with the OIG that a replacement data management system that captures all relevant data in a more configurable, searchable, and analytical manner will enhance our ability to deal with bad actors including those that do not request required permit inspections. As this audit and prior audits note-the Hansen 7 system is extremely limited. As DOB has discussed in this and prior audits, DOB has been working diligently with AIS and its predecessor, DoIT, for more than a decade to have AIS develop a replacement system that will allow DOB to capture all data in a more configurable, searchable, and analytical system. DOB appreciates the work of the OIG in analyzing years of permit and inspection data. DOB does not have the professional auditor resources of the OIG, which is why DOB continues to work diligently with AIS to provide DOB with a modernized, interoperable,

5

#### Audit of DOB's Permit Inspections Process

and analytical permitting and inspection data management system. While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes.

DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result.

While we await our modernized system, DOB has implemented the generation of a daily email that notifies all respective bureaus of all permits that were issued 6 month ago with no inspection requested. The bureaus now assign these locations to their inspectors as they complete their assigned daily requested inspections to see if work has started.

If the work has started but is not ready for a rough inspection, the inspector provides the contractors with the process to request inspections.

If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request further inspections.

If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed.

If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is suspended in the system for inactivity.

4. DOB should consider alternative procedures to ensure permit holders request inspections, such as requiring a wider variety of building receive COOs.

While DOB would not refer to them as alternate procedures, DOB notes that the construction industry and the skilled trades take great

pride in their work and in their commitment to worker and public safety and that includes fulfilling their obligation to request and pass required inspections. Law abiding builders and contractors do not require an alternative procedure to follow the law. Honest builders and contractors do not want to get a DOB stop work order, incur fines, have their permit privileges suspended, or have their trade licenses suspended or revoked. City action aside, honest builders and contractors do not want to incur civil liability for failing to request and pass required inspections. Honest builders and contractors do not put their license, livelihood, and reputation on the line by skipping inspections.

The Municipal Code of Chicago also has stronger sanctions than the IBC for those who fail to request required inspection. In particular, Chicago has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection.

6

#### Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success.

DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result.

DOB does not agree with the OIG's suggestion that the Municipal Code of Chicago should be amended to require a certificate of occupancy for all new construction and renovation permits. Both New York City and Philadelphia, cited by the OIG as models, have encountered significant resource, operational, and administrative challenges in attempting to impose certificate of occupancy requirements on all permits. Further, the Municipal Code of Chicago requires rough and final inspections on permits with substantial structural, mechanical, electrical, plumbing, or ventilation work. Those final inspections serve the same purpose as a certificate of occupancies. Even then, the duty to request a certificate of occupancy inspection remains the affirmative duty of the permit holder. DOB does not believe that the purpose of the Municipal Code of Chicago is to impose additional regulations on law abiding builders and contractors to redress the unlawful behavior of a few bad actors. DOB has supported and continues to support adding tools to the Municipal Code of Chicago, like the bad actor ordinance, which directly and specifically address bad actors. While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes.

While we await our modernized system, DOB has implemented the generation of a daily email that notifies all respective bureaus of all permits that were issued 6 month ago with no inspection requested. The bureaus now assign these locations to their inspectors as they complete their assigned daily requested inspections to see if work has started.

If the work has started but is not ready for a rough inspection, the inspector provides the contractors with the process to request inspections.

If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request further inspections.

If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed.

If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is suspended in the system for inactivity.

In conclusion, DOB again thanks the OIG for its audit and welcomes all constructive input to improve our processes and services.

7

Audit of DOB's Permit Inspections Process

i City of Chicago Office of Inspector General

OFFICE OF INSPECTOR GENERAL

City of Chicago

/AO N. Sedgwick :A'53it, b j;te ^00 Chicsflo, ll'inoisGiXS'. T\*!)?>h-r\*(773) 473-7799 Fox l/(3)4;8 3fi49

Project Title: Audit of permit inspections process

Permit Inspections Process

Project Number: 20-0331

Department Name: Department of Buildings

Date: 7-29-22

Department Head: Commissioner Beaudette

<sup>1</sup>OIG Recommendation "Ugl-C" ■

Agree/ Disagree

Implementation Status: Party Responsible

1. DOB should develop and implement procedures to identify required inspections and ensure it completes those inspections.

Both

DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those system procedures with the contractors and the public. As the OIG noted in the audit, not all building permits rise to the level of inspection. This includes many types of repair and replace (aka Easy) permits - such as the repair or replacement of windows, doors, gutters, fixtures; monthly electric maintenance permits; tuck pointing permits; and other minor work. While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes.

Awaiting mitigation to new Beaudette DOB Cmmr & AIS



Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

OIG Recommendation	Agree/ Disagree	Department's Proposed Action	Implementation - Target Date	Party Responsible
		<p>DOB, like other jurisdictions, follows the International Building Code (IBC) IBC in requiring permit holders and their contractors to notify the department when the work is ready for inspection (IBC Section 110). This is industry best practice and DOB, like other jurisdictions, works in concert with contractors as the work progresses in the field. Construction timelines are fluid and contingent on variables such as financing, weather, material availability and delivery, labor availability, field changes, and even global pandemics. That is exactly why the IBC and codes based on the IBC, like the Chicago Construction Codes, require the permit holder to contact the building department when they are ready for inspection. DOB values its professional partnership with the private sector including the construction industry and the skilled trades. The industry and skilled trades take great pride in their work and in their commitment to worker and public safety. Most contractors and trade professionals take their duty to request and pass inspections to heart. While we await our modernized system, DOB has implemented the generation of a daily email that notifies all respective bureaus of all permits that were issued 6 month ago with no inspection requested. The bureaus now assign these locations to their inspectors as they completed their assigned daily requested inspected to see if work has started. If the work has started but not ready for a rough inspection, the inspector provides the contractors with the process to request inspections.</p>		

Audit of DOB's Permit Inspections Process

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Disagree ■ H\*\* Department's Proposed Action :- ^ ■ ■ (1 m ploirtat loh ii ;ff Party  
Target Date\*: I ^R^ossiblei^

If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request inspections. If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed. If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is voided in the system for inactivity. DOB, like other jurisdictions, realize that there are bad actors. DOB, through the Municipal Code, has various tools to deal with bad actors. As with the IBC, the Municipal Code has stop work orders, permit revocation, fines, and other quasi-judicial and judicial actions that it takes against bad actors. Unlike the IBC, the Municipal Code has the bad actor ordinance (Sections 14A-V304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. When an individual or business is caught under the bad actor ordinance, it is DOB's practice to go and check the prior permits of the bad actor to see if they failed to request the required inspections on those permits as well. Under the ordinance a bad actor cannot be listed on any new permits until they have come into full compliance on all prior projects. The ordinance is a collaboration between DOB, the construction industry, the skilled trades, and the

Audit of DOI's Permit Inspections Process

City of Chicago Office of Inspector General

04G Recommendation	Agree/ <input checked="" type="checkbox"/> Department's Proposed Action Disagree <input type="checkbox"/>	Implementation Target Date	Party _ Responsible
2. DOB should proactively monitor permits Both with no requests for required inspections, and develop monitoring tools and procedures to determine the construction status of buildings.	public to root out bad actors including those that fail to request required permit inspections. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success. DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result. As stated earlier, DOB agrees with the OIG that a modern data management system that captures all relevant data in a more configurable, searchable, and analytical manner will enhance our ability to deal with bad actors including those that do not request required permit inspections. DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those procedures with the contractors and the public. DOB agrees with the OIG that a replacement data management system, which captures all relevant data in a more configurable, searchable, and analytical manner, will enhance our ability to deal with bad actors including those that do not request required permit inspections. DOB will seek to utilize additional resources such as a Mayoral	Awaiting mitigation to new system	Matthew Bcaudet DOB Cmmr & AIS

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

OIG Recommendation - \*=&#x2013; Agree/ Disagree % - : . ' : Department's Proposed Action ' : Implementation.. ^ 'PJTy.:^ 5^ResponsibiehV,

Fellow to compile better documentation of our permit inspection processes. If the work has started hut not ready for a rough inspection, the inspector provides the contractors with the process to request inspections. If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request inspections. If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed. If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is voided in the system for inactivity. DOB, as other jurisdictions, follows the International Building Code (IBC) In requiring permit holders and their contractors to notify the department when the work is ready for inspection (IBC Section 110). This is industry best practice and DOB, and other jurisdictions, work in concert with contractors as the work progresses in the field. Construction timelines are fluid and contingent on variables such as financing, weather, material availability and delivery, labor availability, field changes, and even global pandemics. Building departments do not have crystal balls to monitor construction and renovation and dispatching inspectors based on an uneducated guess as where a project is in the work is neither feasible nor practical. That is exactly why the IBC and codes

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

OIG Recommendation - Agree/ - : Dkagree' Department's Proposed Action Implementation - Target Date " Party Responsible

based on the IBC, like the Chicago Construction Codes, require the permit holder to contact the building department when they are ready for inspection. DOB values its professional partnership with the private sector including the construction industry and the skilled trades. The industry and skilled trades take great pride in their work and in their commitment to worker and public safety. Most contractors and trade professionals take their duty to request and pass inspections to heart. DOB, as other jurisdictions, realizes that there are bad actors. DOB, through the Municipal Code, has various tools to deal with bad actors. As with the IBC, the Municipal Code has stop work orders, permit revocation, fines, and other quasi-judicial and judicial actions that it takes against bad actors. Unlike the IBC, the Municipal Code has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. When an individual or business is caught under the bad actor ordinance, it is DOB's practice to go and check the prior permits of the bad actor to see if they failed to request the required inspections on those permits as well. Under the ordinance they cannot be listed on any new permits until they have come into full compliance on all prior projects. The ordinance is a collaboration between DOB, the construction industry, the skilled trades, and the public to root out bad actors including those that fail to request required

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

■ ■ ■ ■ ■ OtG Recommendation	Agree/Disagree*	Department's Proposed Action	Imp feme mat ion .1^*TargetDate	Party Responsible
		permit inspections. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success. DOB is grateful to the OtG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result. As stated earlier, DOB agrees with the OtG that a modern data management system that captures all relevant data in a more configurable, searchable, and analytical manner will enhance our ability to deal with bad actors including those that do not request required permit inspections.		

i. To facilitate proactive monitoring, DOB should ensure that inspectors and supervisors use the current Hansen 7 system in a more effective and consistent manner. Specifically, DOB should, a ensure that inspectors and other staff consistently and appropriately close permits; b. ensure staff close inspections that are	Both	DOB agrees and has developed and implemented procedures for when inspections are required for building permits. DOB will better document and communicate those procedures with the contractors and the public. DOB agrees with the OIG that a replacement data management system that captures all relevant data in a more configurable, searchable, and analytical manner will enhance our ability to deal with bad actors including those that do not request required peimit inspections. As this audit and prior audits note - the Hansen 7 system is extremely limited. As DOB has discussed in this and prior audits, DOB has been working diligently with AIS and its	Awaiting mitigation to new system	Matthew Beaudet DOB Cmmr & AIS
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Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

OIG Recommendation	Agree/ Disagree	Department's Proposed Action	Implementation Target Date	Party Responsible
incorrectly assigned during categories to differentiate i require inspections and thc training to ensure that staff in a consistent manner; an existing automatically gene if effective, or redesign the effectiveness for tracking c and identifying aged permi inspections.		<p>predecessor, DoIT, for more than a decade to have AIS develop a replacement system that will allow DOB to capture all data in a more configurable, searchable, and analytical system. DOB appreciates the woik of the OIG in analyzing years of permit and inspection data. DOB does not have the professional auditor resoices of the OIG, which is why DOB continues to wotk diligently with AIS to provide DOB with a modernized, interoperable, and analytical permitting and inspection data management system. While DOB awaits a modernized automation system, DOB will seek to utilize additional resources such as a Mayoral Fellow to compile better documentation of our permit inspection processes. DOR hao alr,o requested that the OIG r.hnro the fCHmd-4»havofoirCHtto-feqtK^tK&gt;-&gt;yf&lt;?quired</p> <p>under the bad actor ordinance, DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor That general contractor will remain suspended until such time as all requited inspections have received a passing inspection result. While we await our modernized system, DOB has implemented the generation of a daily email that notifies all respective bureaus of all permits that were issued 6 month ago with no inspection requested. The bureaus now assign these locations to their inspectors</p>		

Audit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

OIG Recommendation	■ ■'Agree/ ' ' Department's Proposed Action Db agree '	Implementation Target Date	Party / Responsible*
A. DOB should consider alternative procedures to ensure permit holders request Inspections, such as requiring that a wider variety of buildings receive COOs.	Both  as they complete their assigned daily requested inspections to see if work has started. If the work has started but is not ready for a rough inspection, the inspector provides the contractors with the process to request inspections. If the work has started and is at a stage for a rough inspection, the inspector can complete the inspection and provides the contractors with the process to request further inspections. If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed. If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is suspended in the system for inactivity.		
	While DOB would not refer to them as alternate procedures, DOB notes that the construction industry and the skilled trades take great pride in their work and in their commitment to worker and public safety and that includes fulfilling their obligation to request and pass required inspections. Law abiding builders and contractors do not require an alternative procedure to follow the law. Honest builders and contractors do not want to get a DOB stop work order, incur fines, have their permit privileges suspended, or have their trade licenses suspended or revoked. City action aside, honest builders and contractors do not want to incur civil liability for	Awaiting mitigation to new system	Matthew Bcaudet DOB Cmmr & AIS

Andit of DOB's Permit Inspections Process

City of Chicago Office of Inspector General

C»G Recommendation	: Agree/ ... Disagree ■	Department's Proposed Action	. Implementation Target Date	Party Responsible
		<p>failing to request and pass required inspections. Honest builders and contractors do not put their license, livelihood, and reputation on the line by skipping inspections. The Municipal Code of Chicago also has stronger sanctions than the IBC for those who fail to request required inspection. In particular, Chicago has the bad actor ordinance (Sections 14A-3-304 and 14A-3-305), which allows DOB to suspend permit privileges and suspend and revoke trade and construction-related licenses including for failure to request a required inspection. Several major jurisdictions, including New York City, have considered emulating the bad actor ordinance because of its success. DOB is grateful to the OIG auditors for discovering a current general contractor that did not request all of the required inspections on nine projects and DOB has subsequently suspended the permit privileges of that general contractor. That general contractor will remain suspended until such time as all required inspections have received a passing inspection result DOB does not agree with the OIG's suggestion that the Municipal Code of Chicago should be amended to require a certificate of occupancy for all new construction and renovation permits. Both New York City and Philadelphia, cited by the OIG as models, have encountered significant resource, operational, and administrative challenges in attempting to impose certificate of occupancy requirements on all permits. Further, the Municipal Code of Chicago requires rough and final inspections on permits with substantial</p>		





1< OIG Recommendation	Agree/Disagree/Department's Proposed Action	Implementation VHf Tar jot Date r-
	Disagree/IV	



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If the work has been completed, we require the opening of walls pursuant to the code so that an inspection can be performed. If the work has not started and exceeds the time under the Municipal Code of Chicago to commence construction, the permit is suspended in the system for inactivity. In conclusion, DOB again thanks the OIG for its audit and welcomes all constructive input to improve our processes and services.

Responsible:.....

Audit of DOB's Permit Inspections Process

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**Cover photo courtesy of Canva. Alternate formats available upon request.**

August 2022  
File #20-0831

## Why We Did This Audit

DOB is responsible for ensuring that buildings in the City of Chicago are safe and conform to the Chicago Construction Codes. The objective of the audit was to determine if DOB inspects construction work subject to permit requirements to

verify compliance with the Codes.

## Background

The mission of DOB is to "enhance safety and quality of life for Chicago's residents and visitors through permitting, inspections, trade licensing, and code enforcement." To administer the Construction Codes, DOB reviews construction plans, issues building permits, performs inspections in response to requests or complaints, issues citations for building code violations, and issues Certificates of Occupancy for eligible buildings.

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*We thank DOB staff and management for their cooperation during the audit.*

## Audit of the Department of Buildings' Permit Inspections Process

The Office of Inspector General (OIG) conducted an audit of the inspection process used by the Department of Buildings (DOB) for permitted construction work.

DOB relies on requests from permit holders to schedule inspections. This process complies with the Chicago Construction Codes, but it does not ensure that permit holders request all required inspections. DOB does not have a process to determine which permits require inspections or which inspections remain outstanding. While DOB reliably schedules inspections once it receives requests and only issues Certificates of Occupancy (COO) once it completes inspections, its reactive approach allows for the construction and occupation of some buildings which do not require COOs without the completion of all required inspections.

## Findings

Except in situations where DOB requires a COO, its inspection processes allow some permit holders to construct and occupy buildings which have not passed required inspections. In a review of 80 permits issued between January 1, 2017 and December 31, 2019, OIG identified 42 buildings within DOB's permit and inspection system that did not have all required inspections, and determined that the associated buildings had been fully constructed. These included 35 single-family homes, several of which have already been sold or listed for sale. In these 42 cases, DOB told OIG that the general contractors had failed to request inspections. While DOB consistently performs requested inspections, it does not use available data to identify situations in which permit holders have not requested required inspections. In contrast, DOB does ensure the inspection of buildings that require COOs.

## Recommendations

OIG recommends that DOB develop procedures to ensure it completes required inspections before a building is fully constructed. The Department should also train its staff to maintain data in an effective and consistent manner. DOB should proactively monitor issued permits, and improve its data quality to support thorough and accurate monitoring of those permits and evaluation of program performance. Finally, the Department should consider alternative procedures to ensure permit holders request inspections, such as requiring that a wider variety of buildings receive COOs.

## Department Response

In response, DOB stated that it has implemented new procedures related to building permit inspections. DOB committed to improving documentation and communication of those procedures to contractors and the public. DOB stated that it has worked with the Department of Assets, Information and Services (AIS) "for well over a decade" to replace its permit and inspection data management system. Until the system is replaced, DOB has implemented a daily email that identifies permits over six months old with no inspection requests. DOB did not describe specific procedures to improve the data quality in the current system.